

ASTD/TDI Project Static Report

Integrated Suite of Technologies for Delineation of Contamination in Support of Radioactive Soil Remediation Systems

Focus Area: Subsurface Contaminants Focus Area

Focus Area Manager: Carl Lanigan, (803) 725-0404

TTP No.: OH08SD10

Principal Investigator: Rob Janke, (513) 648-3124

Lead Site: Ohio - Fernald

Project No.: 98-TDI-06

Technology Vendor(s)/Commercial Partner(s):

Tech ID/TMS No.:

None identified at this time

Related Publication(s): N/A

Web Page(s):

Description: ITS is a suite of radionuclide (gamma) soil characterization technologies: mobile radiation tracking system (RTRAK) with GPS, radiation scanning system (RSS), and portable high-purity Germanium (HpGe) sensors for in-site gamma spec. ITS has been integrated with a real-time mapping and positioning package to provide field support. It has been deployed at FEMP to support soil excavation activities, reducing the volume of soil to be excavated and disposed as LLRW.

Application: At sites containing soils contaminated with gamma-emitting radionuclides. Optimum deployment conditions include soil moisture content <30% (lab equivalent), areas with low background radon concentrations, grassy or sparsely wooded areas with small amounts of gravel, and topographical surfaces with inclines of <30 degrees.

Location(s): Fernald

Technology(ies):

Mobile Radiation Tracking System (RTRAK)

Portable High-Purity Germanium Sensors

Radiation Scanning System (RSS)

	Funding (\$K):	<u>FY-98</u>	<u>FY-99</u>	<u>FY-00</u>	<u>FY-01</u>	<u>Total</u>
TTP No.:	OH08SD10	\$1,725	\$805	\$825	\$0	\$3,355
Leverage Source:	EM-40					\$150
						\$3,505
					Funding Total (\$K):	\$3,505

Cost Savings (\$M):	<u>Proposal</u>	<u>Deployment Plan/TTP</u>	<u>Current Focus Area Projection</u>
	Pending	Pending	\$34,000